R5F104
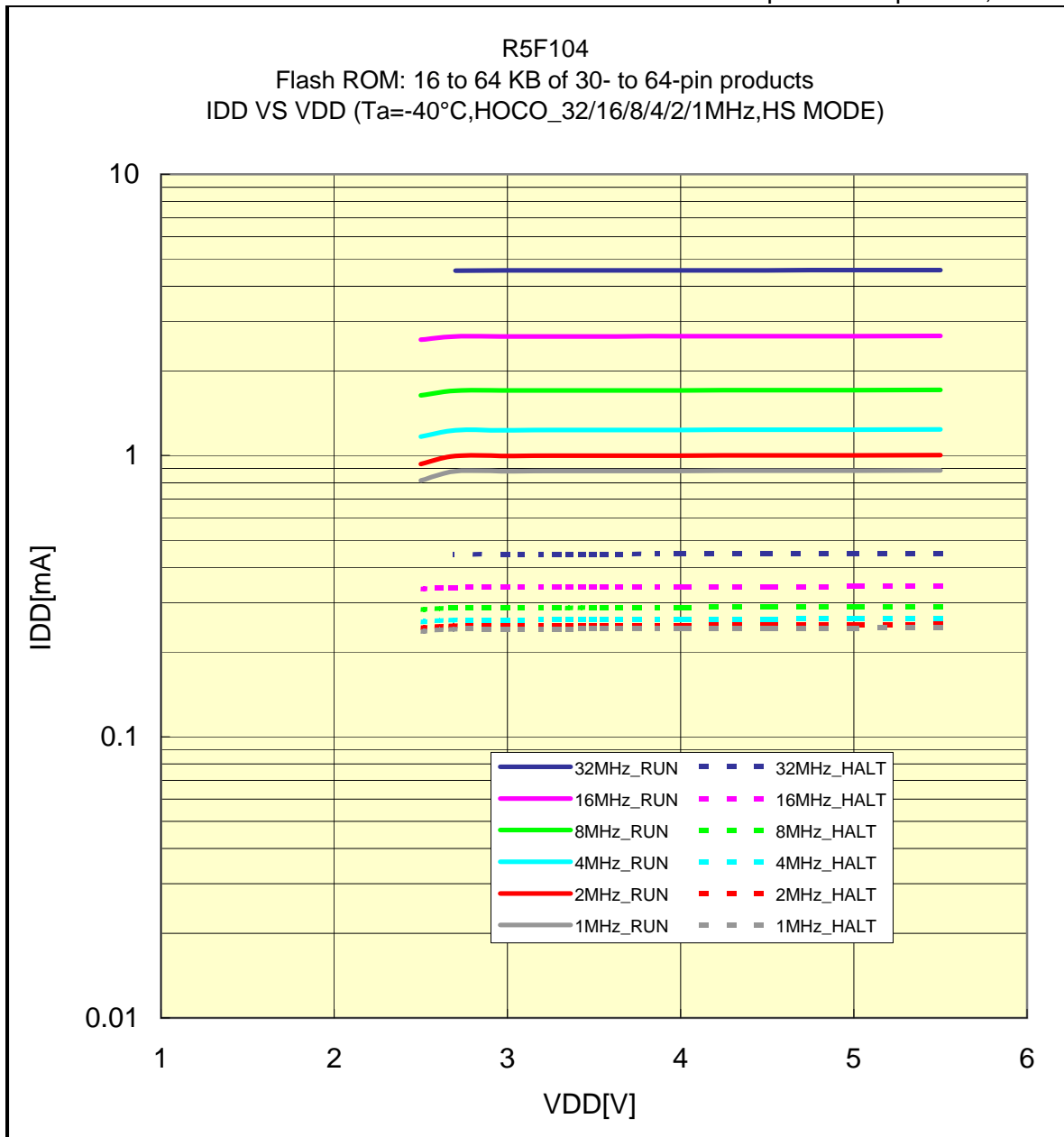**Flash ROM: 16 to 64 KB of 30- to 64-pin products**

IDD VS VDD(-40°C/HOCO_32/16/8/4/2/1MHz/HS MODE)

Prepared on Apr. 17th, 2012

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
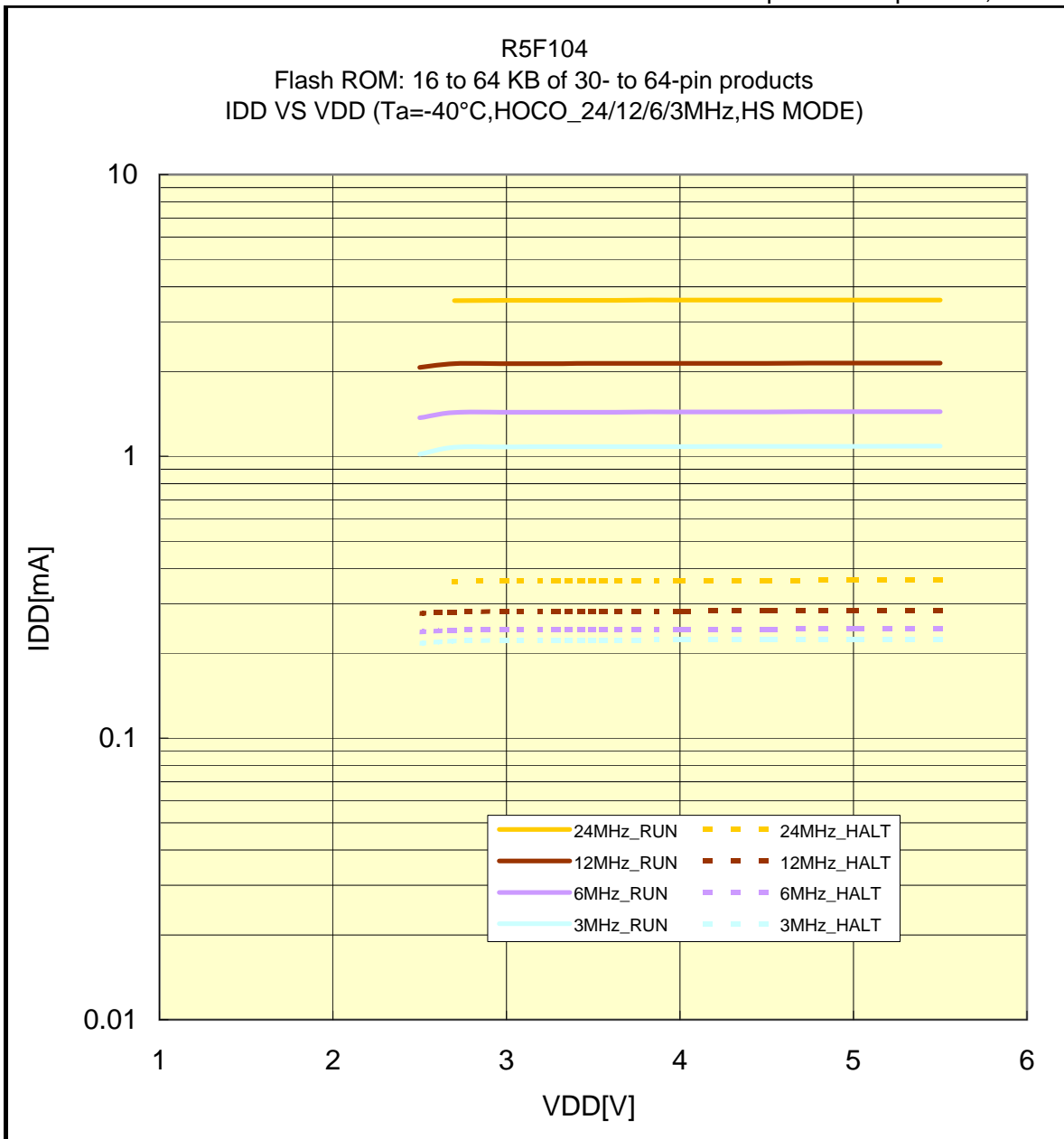IDD VS VDD (Ta=-40°C,HOCO_32/16/8/4/2/1MHz,HS MODE)

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(-40°C/HOCO_24/12/6/3MHz/HS MODE)

Prepared on Apr. 17th, 2012

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
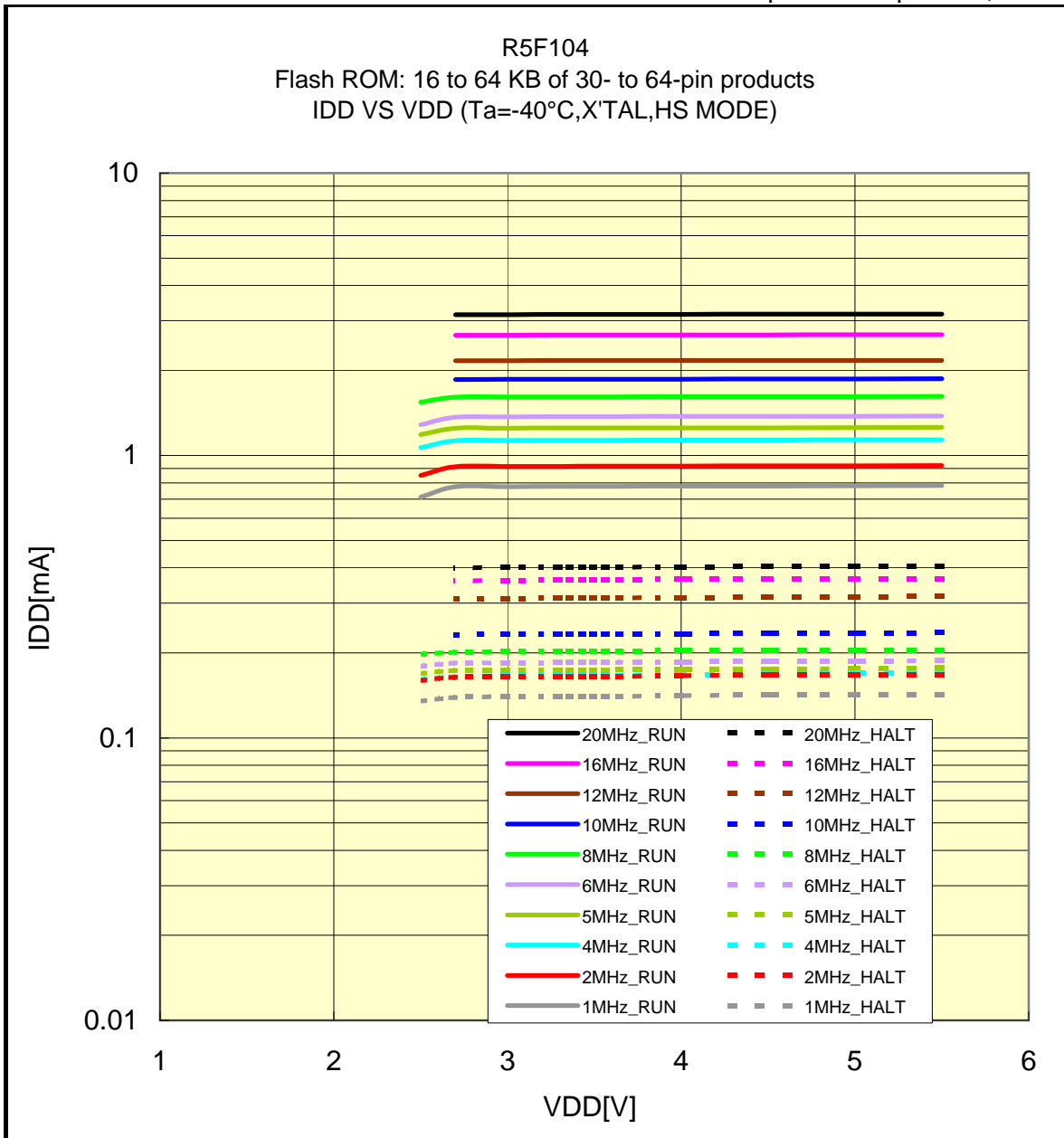IDD VS VDD (Ta=-40°C,HOCO_24/12/6/3MHz,HS MODE)

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(-40°C/X'TAL/HS MODE)

Prepared on Apr. 17th, 2012

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
IDD VS VDD (Ta=-40°C,X'TAL,HS MODE)

Legend:
- 20MHz_RUN — 20MHz_HALT
- 16MHz_RUN — 16MHz_HALT
- 12MHz_RUN — 12MHz_HALT
- 10MHz_RUN — 10MHz_HALT
- 8MHz_RUN — 8MHz_HALT
- 6MHz_RUN — 6MHz_HALT
- 5MHz_RUN — 5MHz_HALT
- 4MHz_RUN — 4MHz_HALT
- 2MHz_RUN — 2MHz_HALT
- 1MHz_RUN — 1MHz_HALT

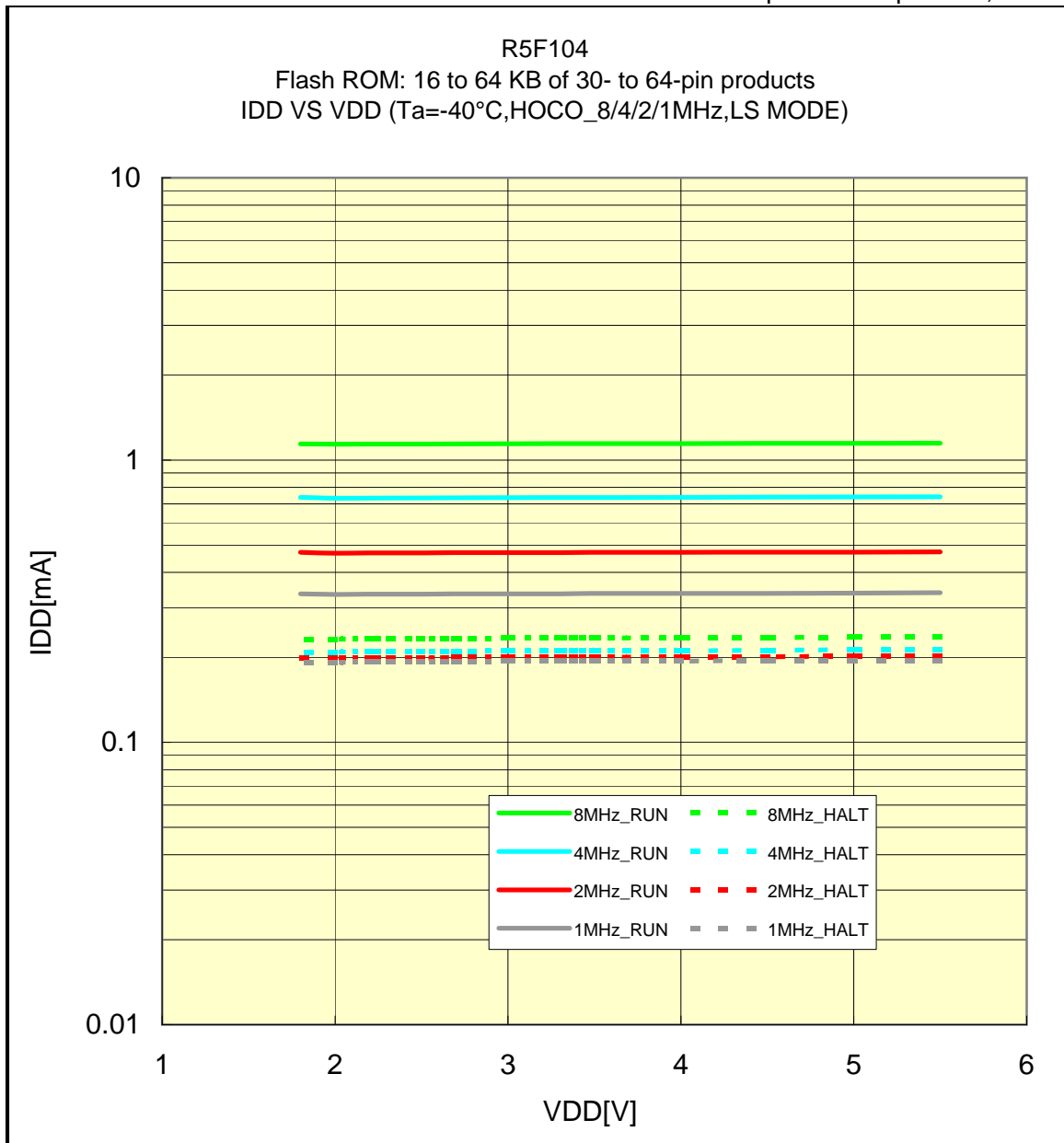X-axis: VDD[V]
Y-axis: IDD[mA]

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(-40°C/HOCO_8/4/2/1MHz/LS MODE)

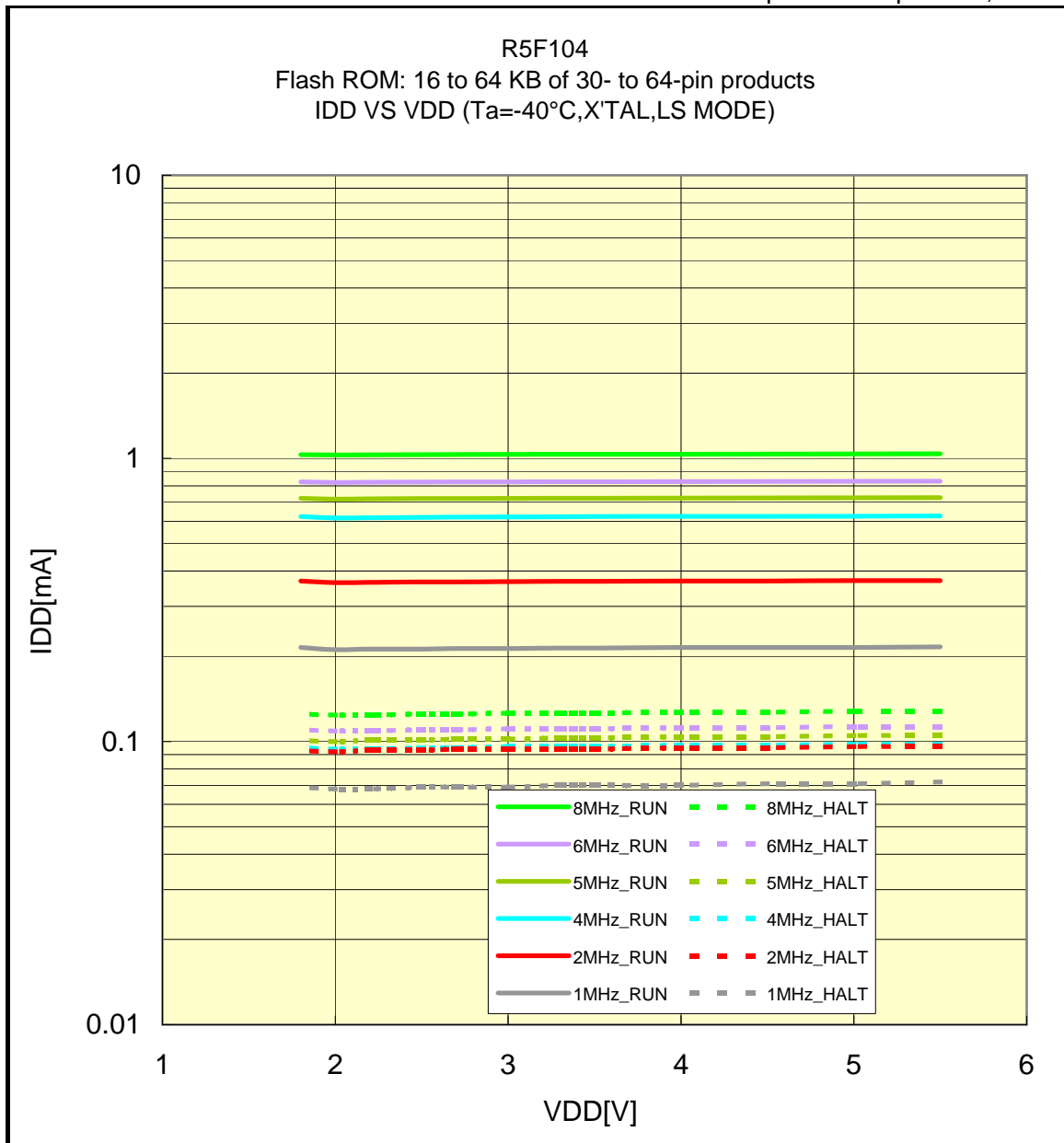Prepared on Apr. 17th, 2012

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(-40°C/X'TAL/LS MODE)

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
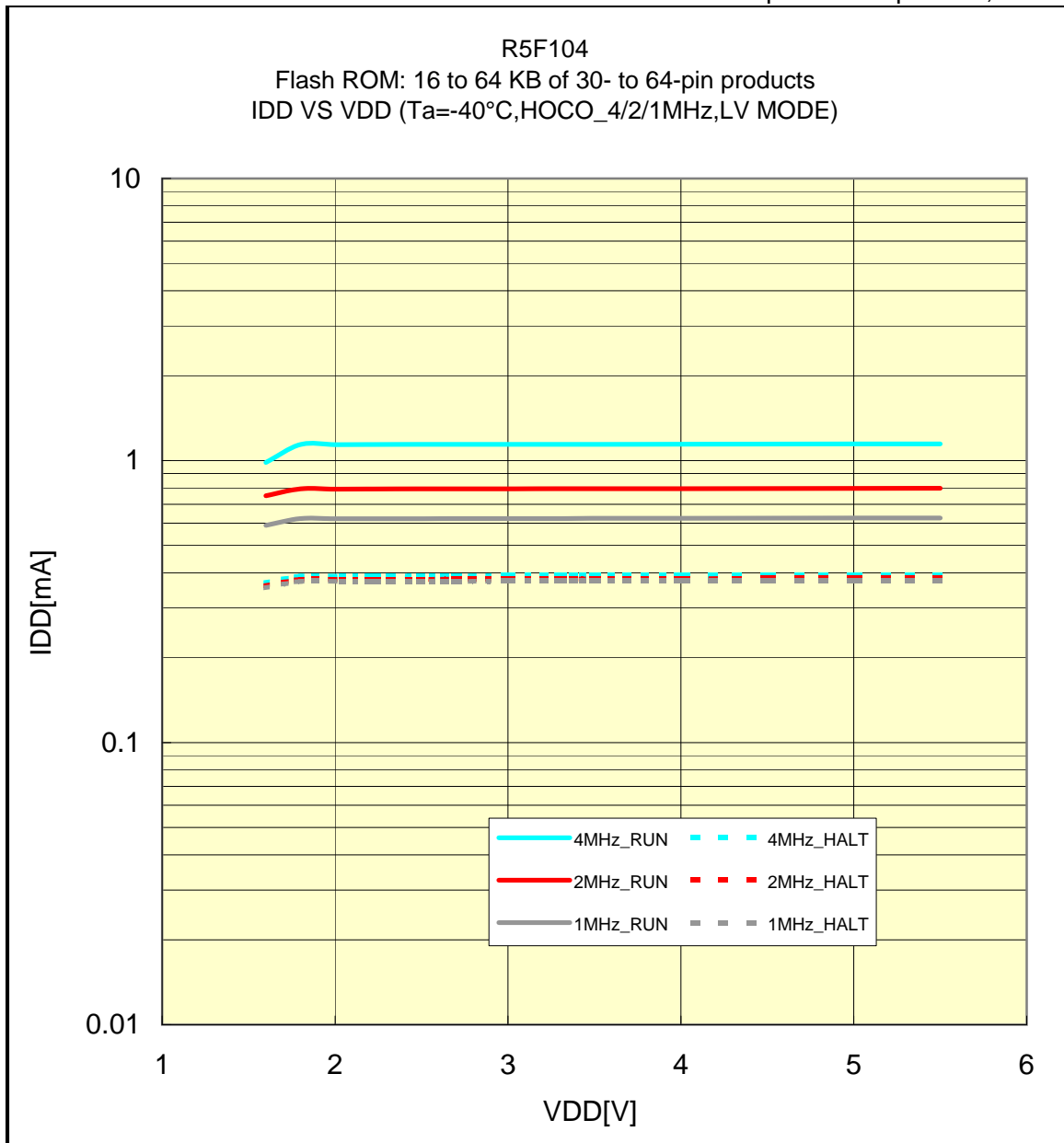IDD VS VDD (Ta=-40°C,X'TAL,LS MODE)

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(-40°C/HOCO_4/2/1MHz/LV MODE)

Prepared on Apr. 17th, 2012

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
IDD VS VDD (Ta=-40°C,HOCO_4/2/1MHz,LV MODE)

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(-40°C/X'TAL/LV MODE)

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
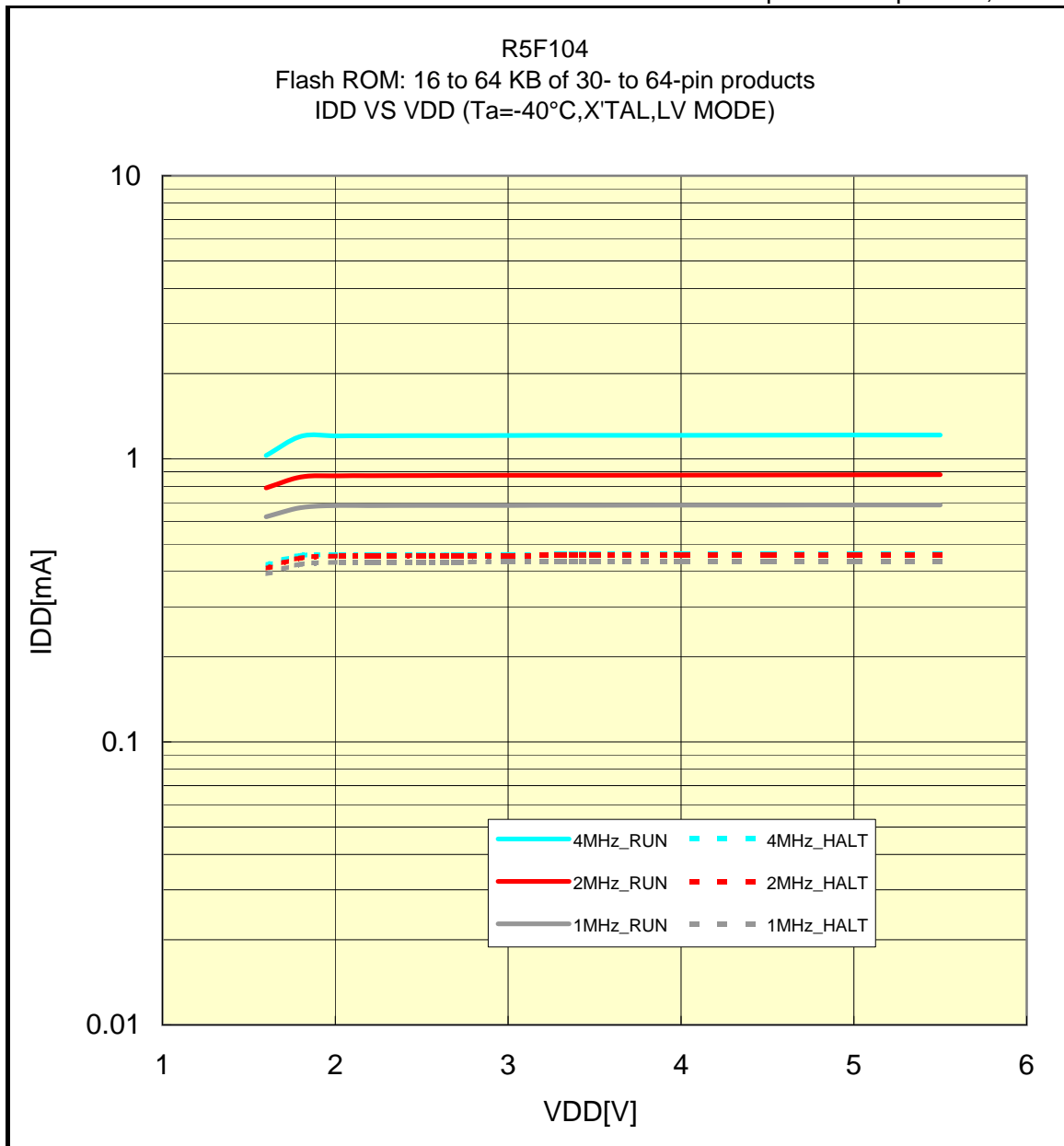IDD VS VDD (Ta=-40°C,X'TAL,LV MODE)

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(-40°C/sub_clock/32.768KHz)

Prepared on Apr. 17th, 2012

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
IDD VS VDD (Ta=-40°C,sub_clock,32.768KHz)

Legend:
- RUN(低消費発振)
- HALT(低消費発振)
- RUN(通常発振)
- HALT(通常発振)
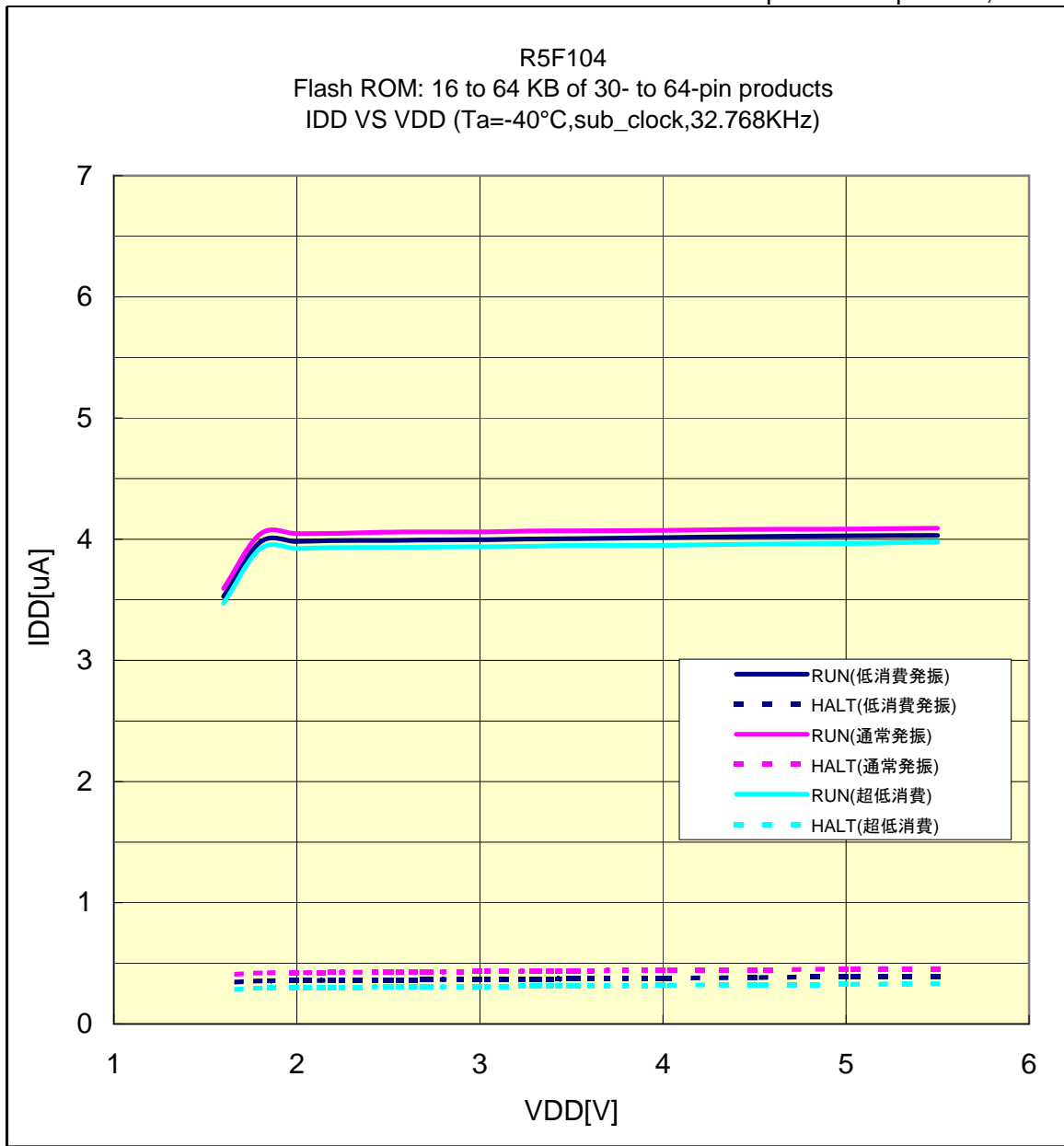- RUN(超低消費)
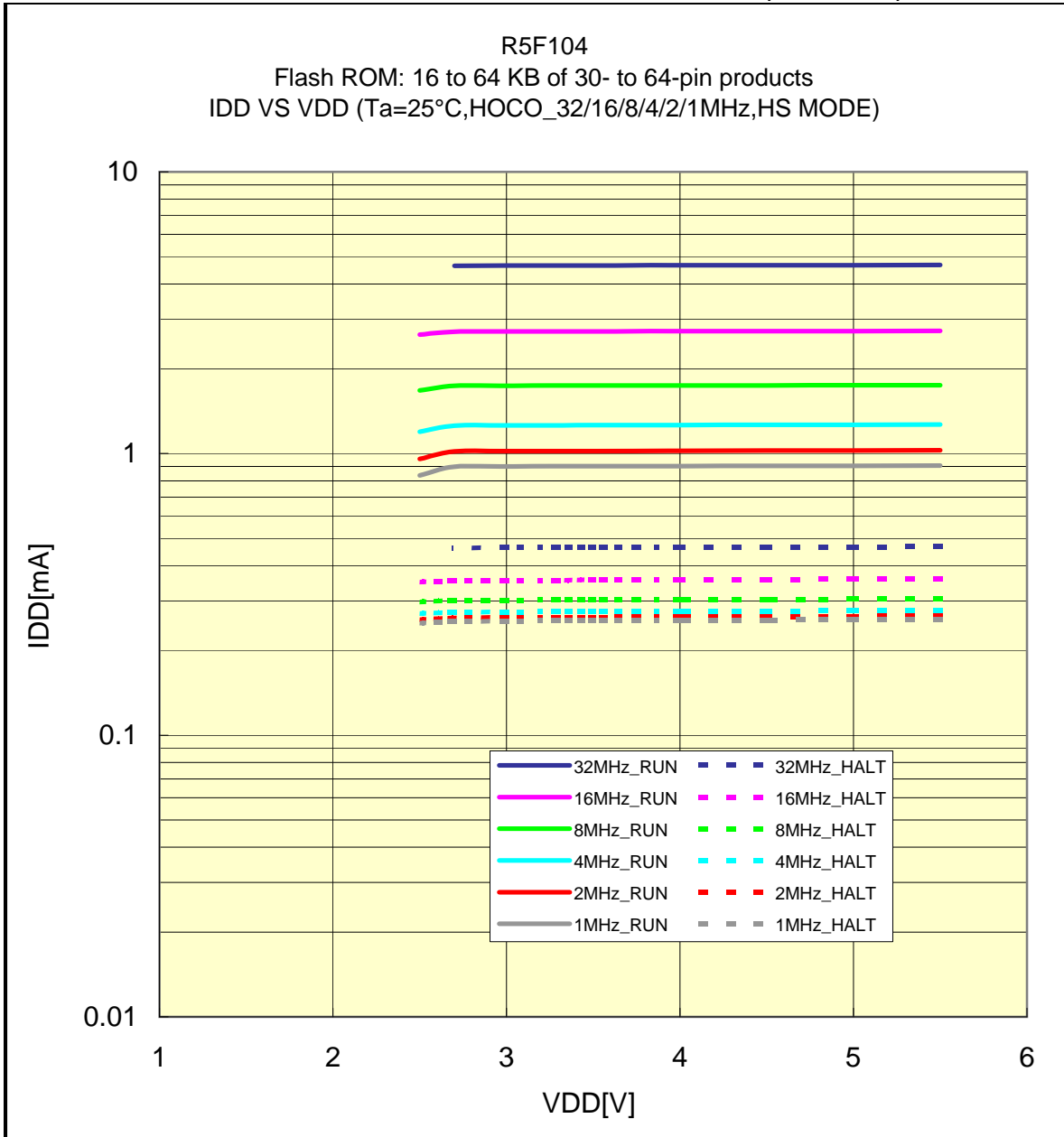- HALT(超低消費)

IDD[uA] vs VDD[V]

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(25°C/HOCO_32/16/8/4/2/1MHz/HS MODE)

Prepared on Apr. 17th, 2012

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
IDD VS VDD (Ta=25°C,HOCO_32/16/8/4/2/1MHz,HS MODE)

Legend:
- 32MHz_RUN — 32MHz_HALT
- 16MHz_RUN — 16MHz_HALT
- 8MHz_RUN — 8MHz_HALT
- 4MHz_RUN — 4MHz_HALT
- 2MHz_RUN — 2MHz_HALT
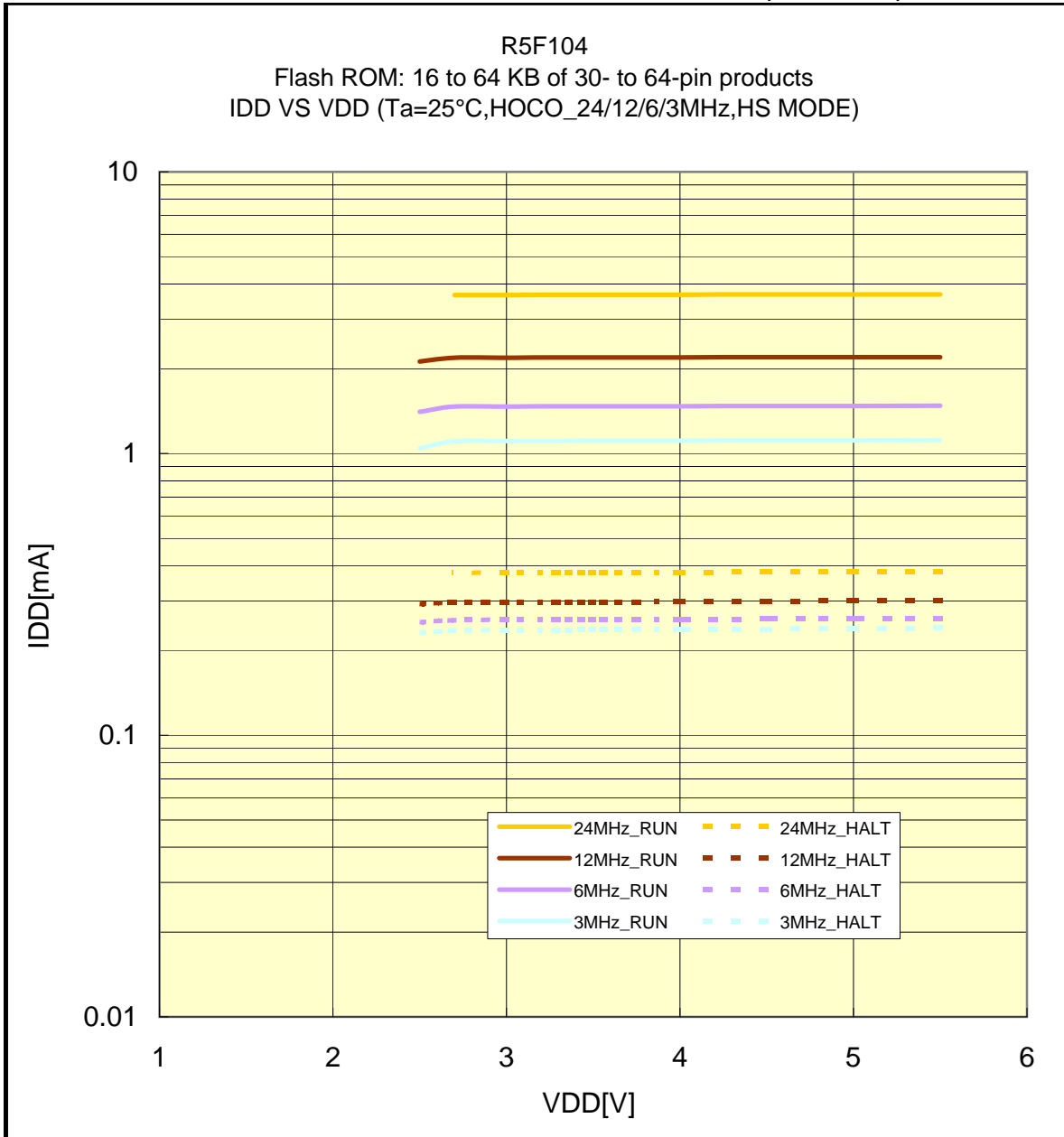- 1MHz_RUN — 1MHz_HALT

Y-axis: IDD[mA]
X-axis: VDD[V]

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(25°C/HOCO_24/12/6/3MHz/HS MODE)

Prepared on Apr. 17th, 2012

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
IDD VS VDD (Ta=25°C,HOCO_24/12/6/3MHz,HS MODE)

Legend:
- 24MHz_RUN
- 24MHz_HALT
- 12MHz_RUN
- 12MHz_HALT
- 6MHz_RUN
- 6MHz_HALT
- 3MHz_RUN
- 3MHz_HALT

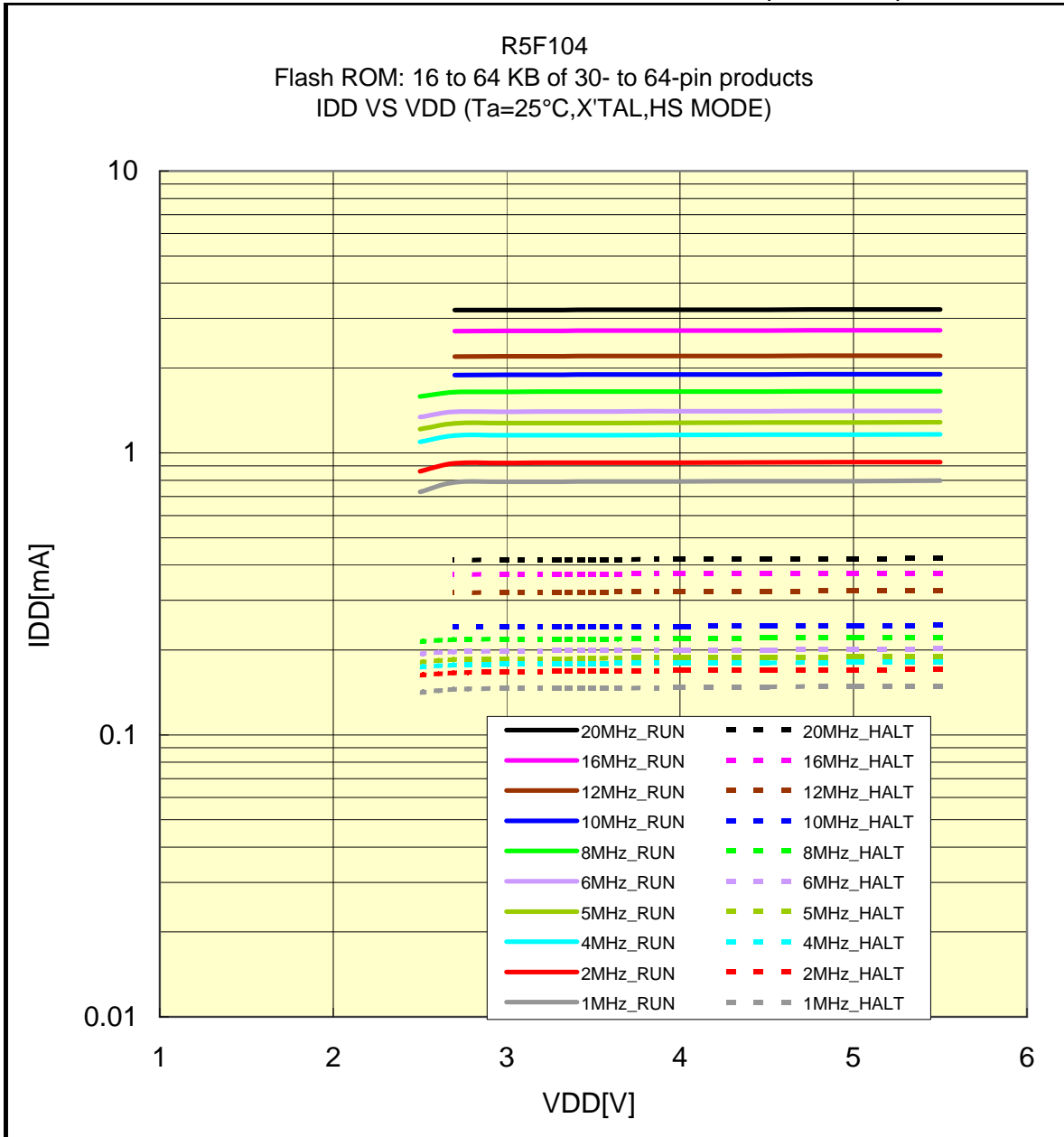X-axis: VDD[V]
Y-axis: IDD[mA]

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(25°C/X'TAL/HS MODE)

Prepared on Apr. 17th, 2012

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
IDD VS VDD (Ta=25°C,X'TAL,HS MODE)

20MHz_RUN	20MHz_HALT
16MHz_RUN	16MHz_HALT
12MHz_RUN	12MHz_HALT
10MHz_RUN	10MHz_HALT
8MHz_RUN	8MHz_HALT
6MHz_RUN	6MHz_HALT
5MHz_RUN	5MHz_HALT
4MHz_RUN	4MHz_HALT
2MHz_RUN	2MHz_HALT
1MHz_RUN	1MHz_HALT

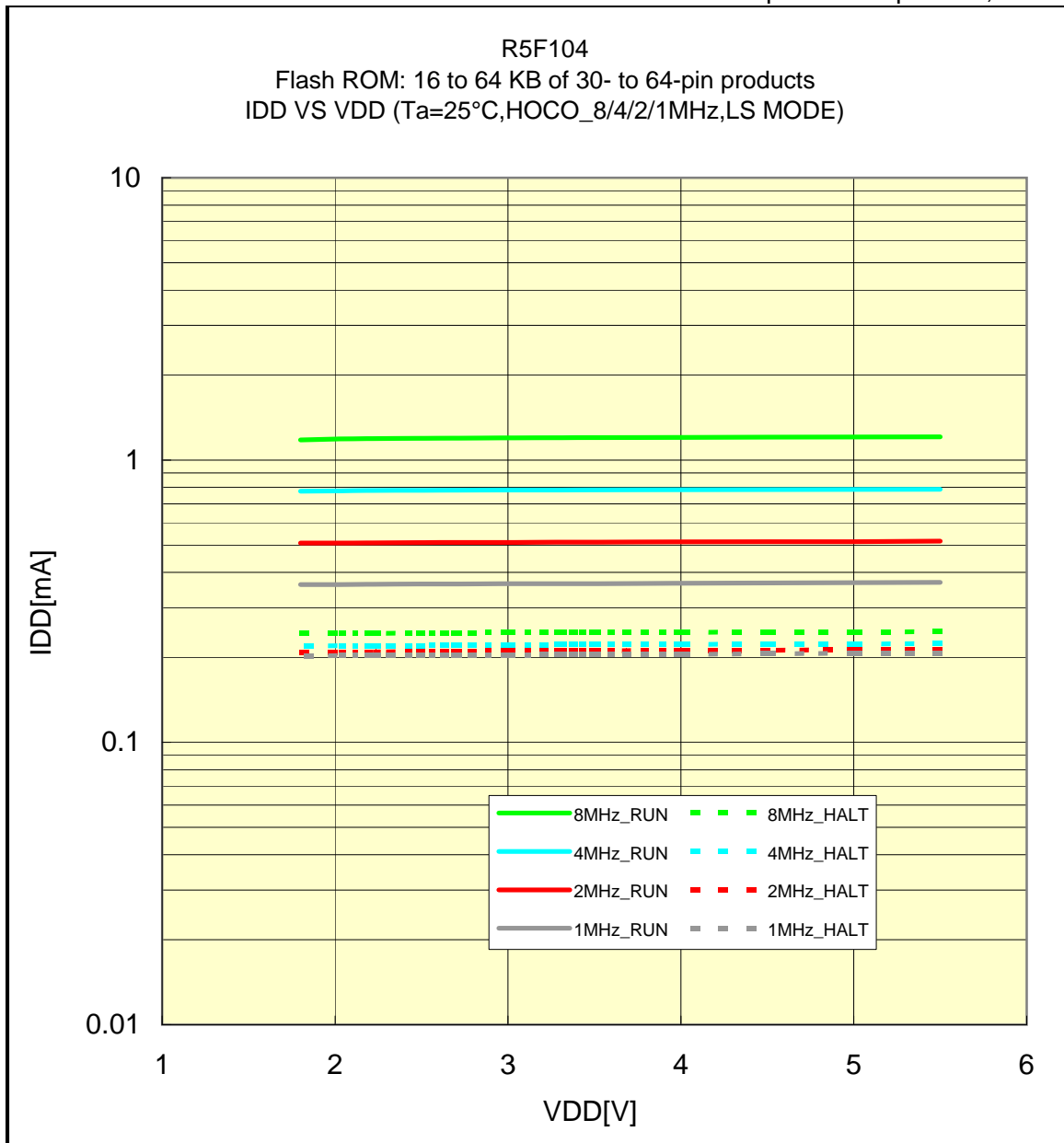IDD[mA] (y-axis), VDD[V] (x-axis)

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(25°C/HOCO_8/4/2/1MHz/LS MODE)

Prepared on Apr. 17th, 2012

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
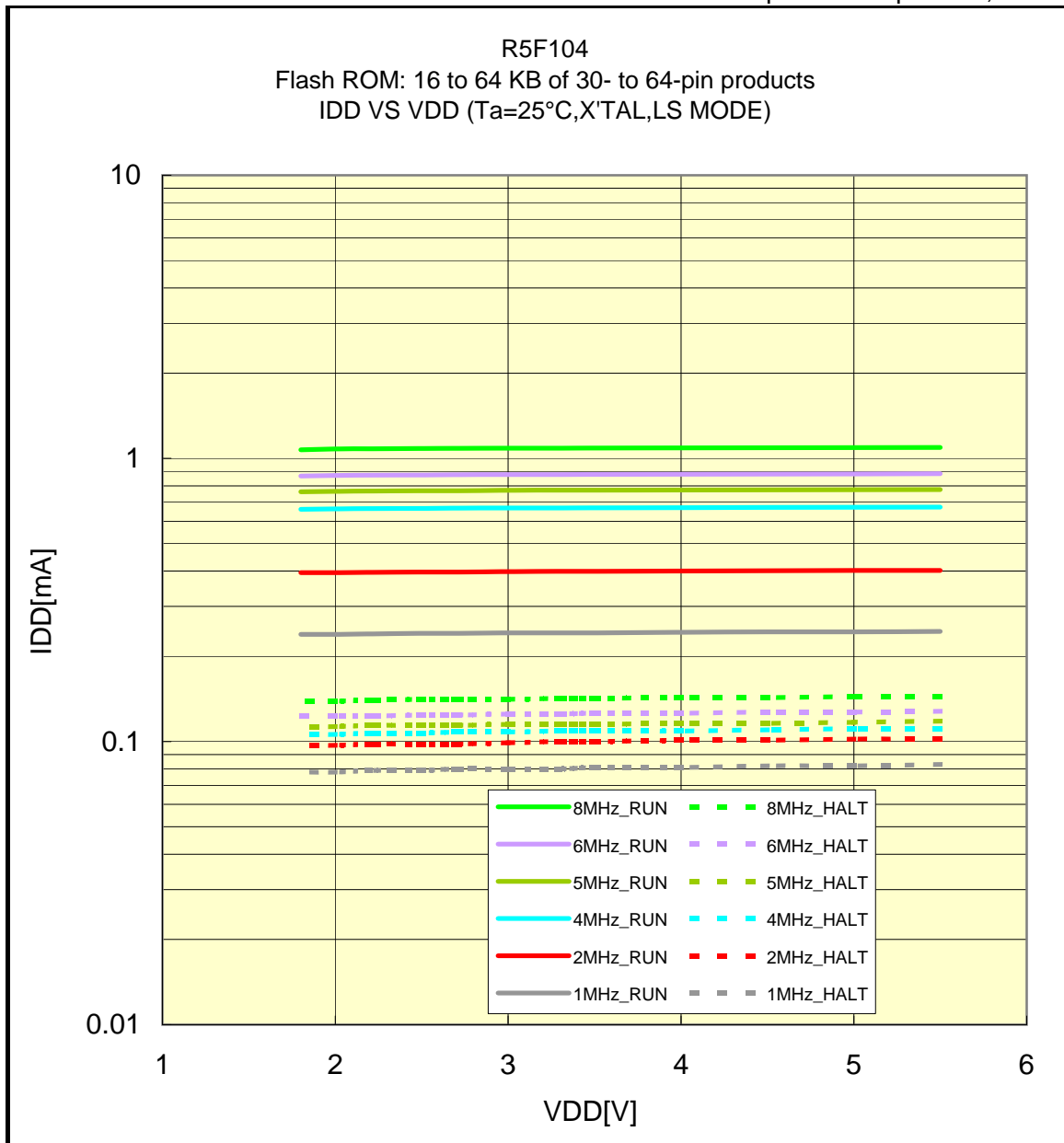IDD VS VDD (Ta=25°C,HOCO_8/4/2/1MHz,LS MODE)

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(25°C/X'TAL/LS MODE)

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
IDD VS VDD (Ta=25°C,X'TAL,LS MODE)

Legend:
- 8MHz_RUN / 8MHz_HALT
- 6MHz_RUN / 6MHz_HALT
- 5MHz_RUN / 5MHz_HALT
- 4MHz_RUN / 4MHz_HALT
- 2MHz_RUN / 2MHz_HALT
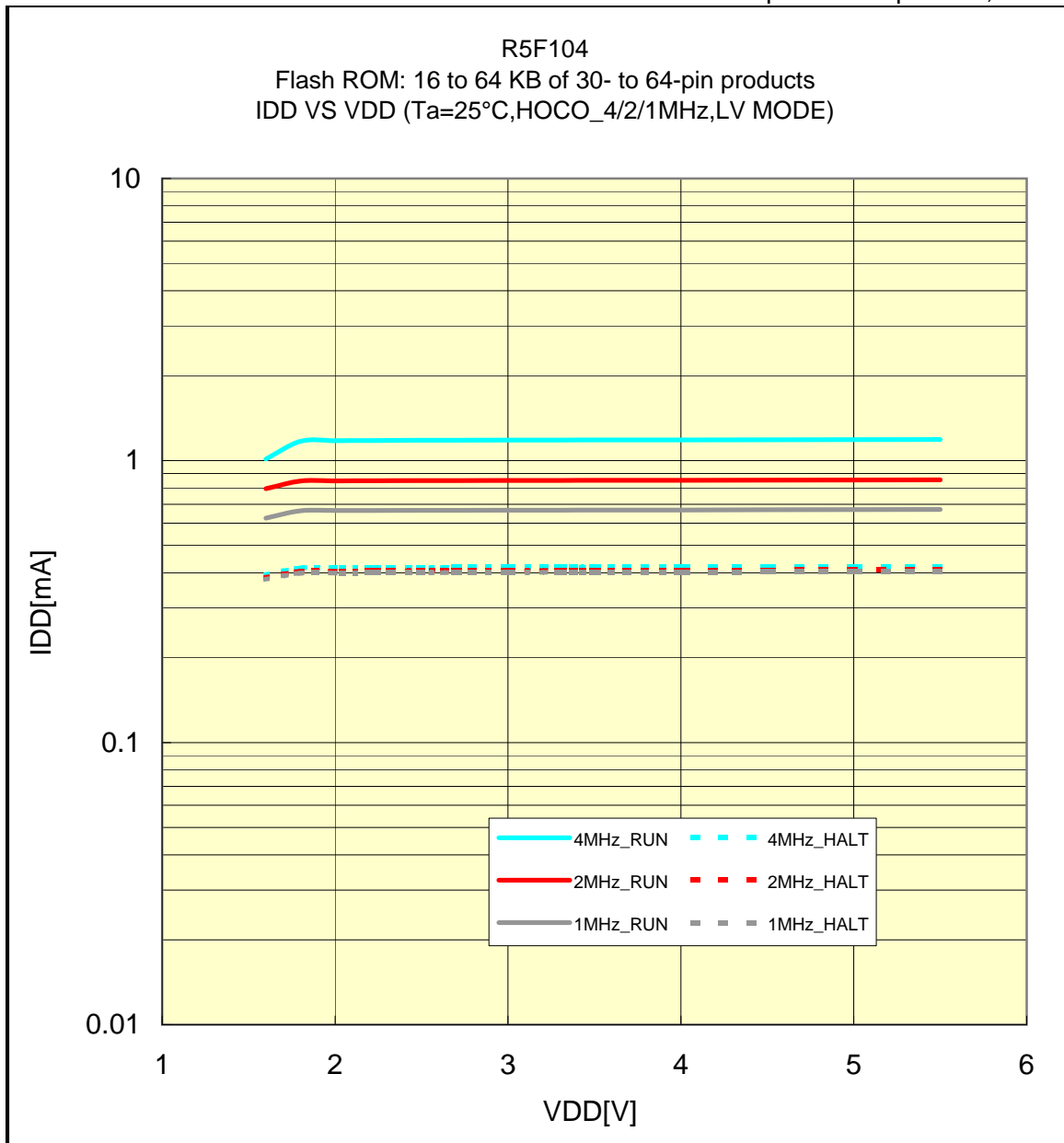- 1MHz_RUN / 1MHz_HALT

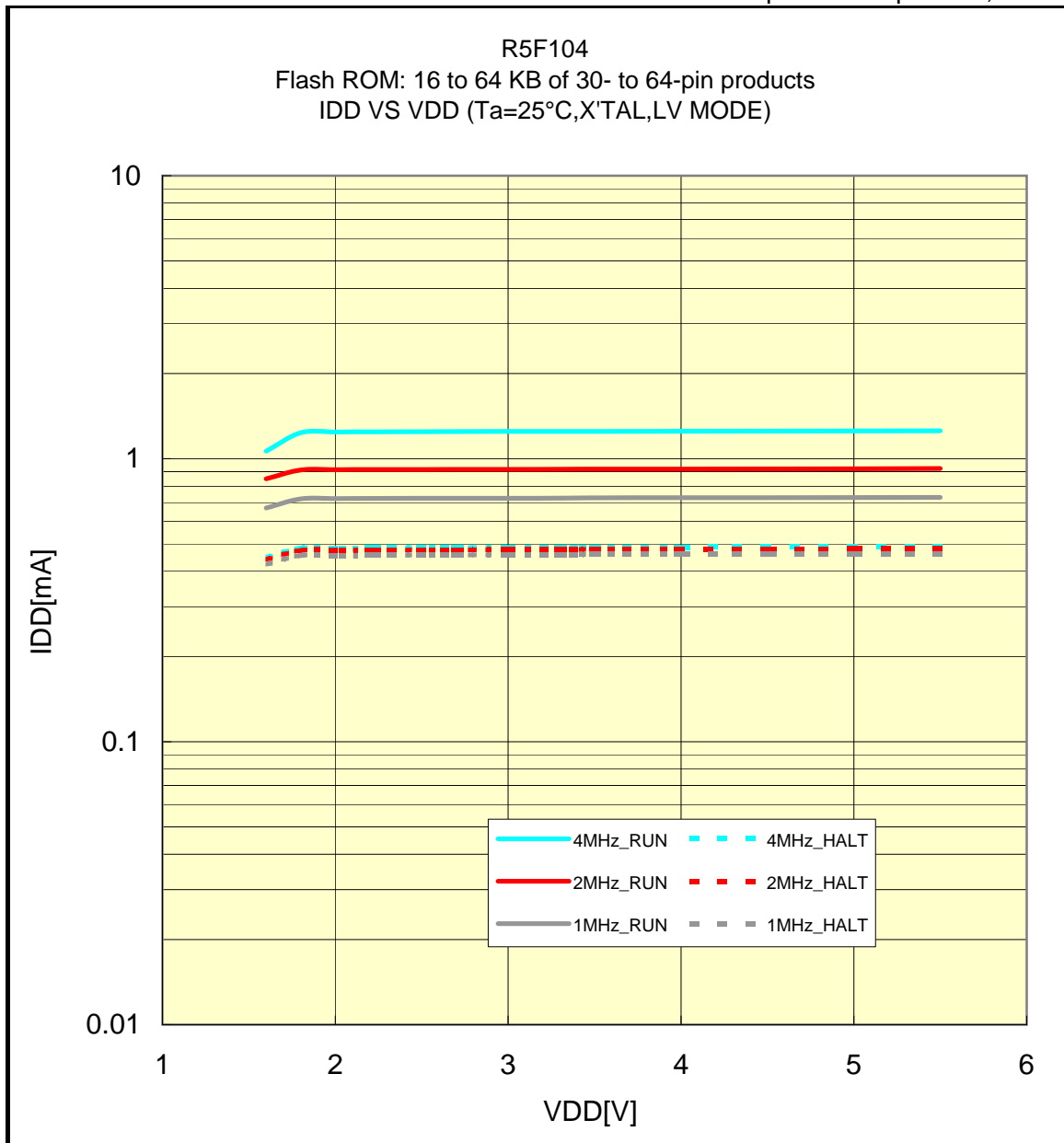X-axis: VDD[V]
Y-axis: IDD[mA]

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(25°C/HOCO_4/2/1MHz/LV MODE)

Prepared on Apr. 17th, 2012

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
IDD VS VDD (Ta=25°C,HOCO_4/2/1MHz,LV MODE)

Legend:
- 4MHz_RUN — 4MHz_HALT
- 2MHz_RUN — 2MHz_HALT
- 1MHz_RUN — 1MHz_HALT

Axes: IDD[mA] vs VDD[V]

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(25°C/X'TAL/LV MODE)

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
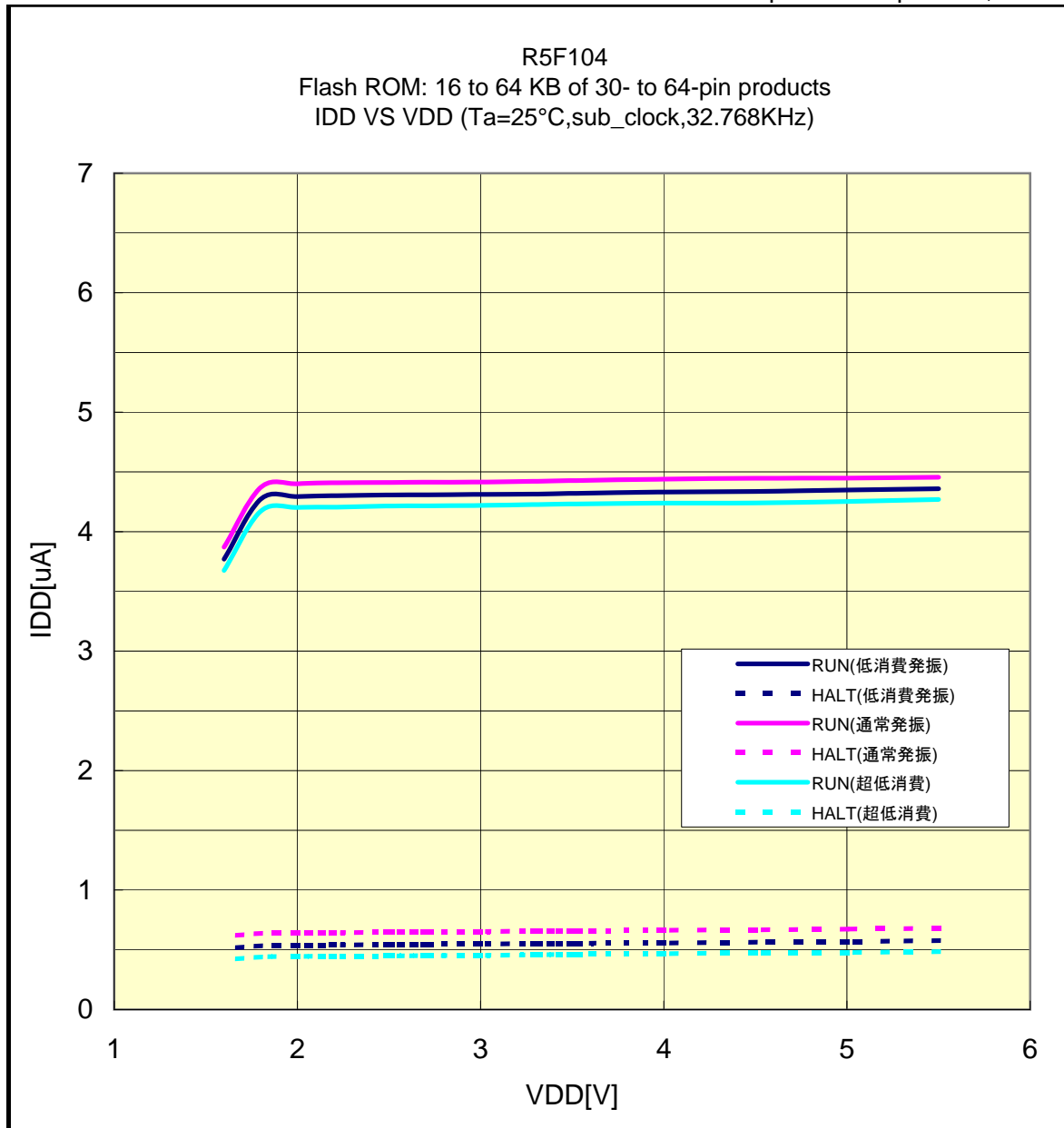IDD VS VDD (Ta=25°C,X'TAL,LV MODE)

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(25°C/sub_clock/32.768KHz)

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
IDD VS VDD (Ta=25°C,sub_clock,32.768KHz)

Legend:
- RUN(低消費発振)
- HALT(低消費発振)
- RUN(通常発振)
- HALT(通常発振)
- RUN(超低消費)
- HALT(超低消費)

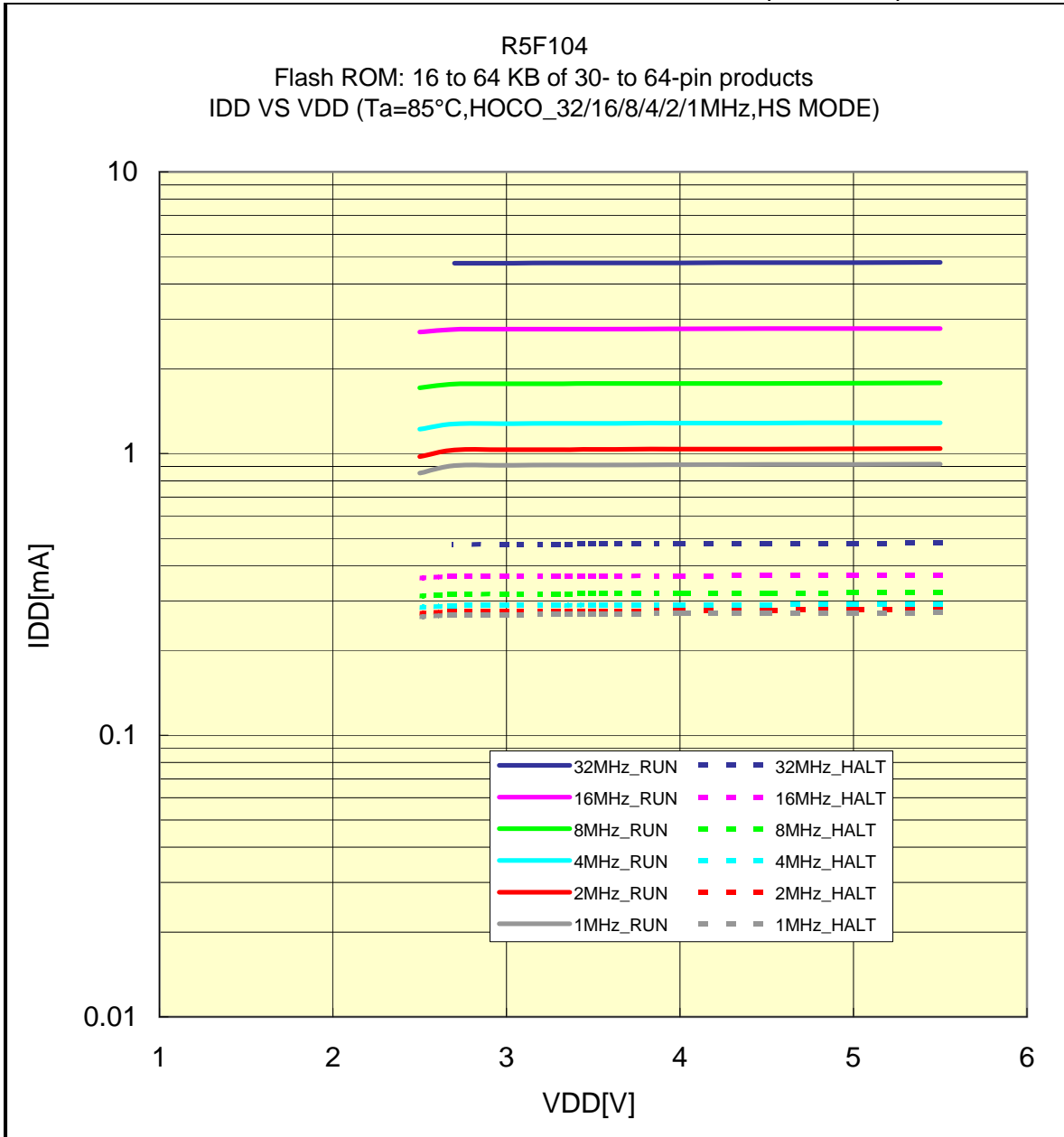Y-axis: IDD[uA]
X-axis: VDD[V]

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(85°C/HOCO_32/16/8/4/2/1MHz/HS MODE)

Prepared on Apr. 17th, 2012

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
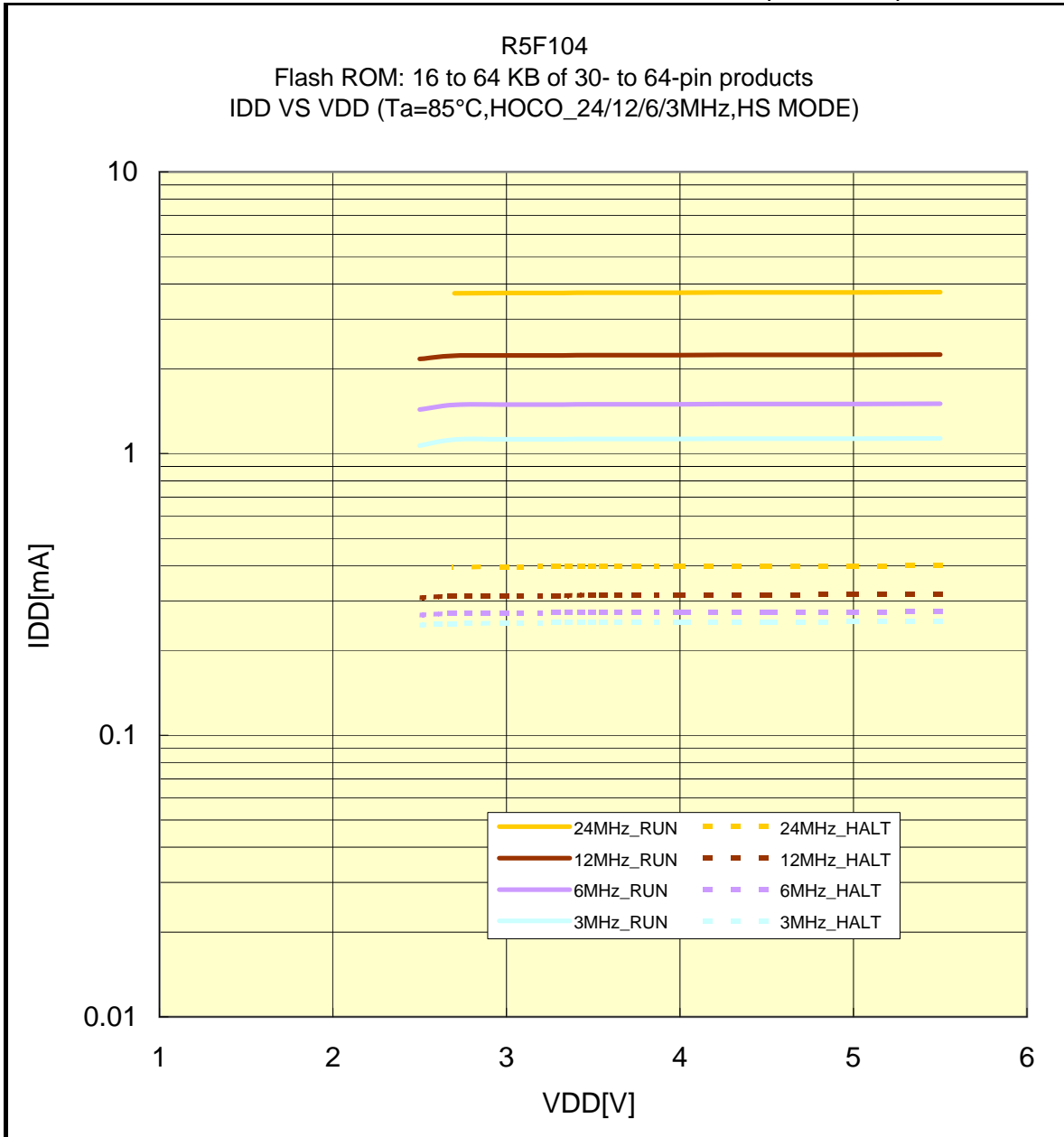IDD VS VDD (Ta=85°C,HOCO_32/16/8/4/2/1MHz,HS MODE)

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(85°C/HOCO_24/12/6/3MHz/HS MODE)

Prepared on Apr. 17th, 2012

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
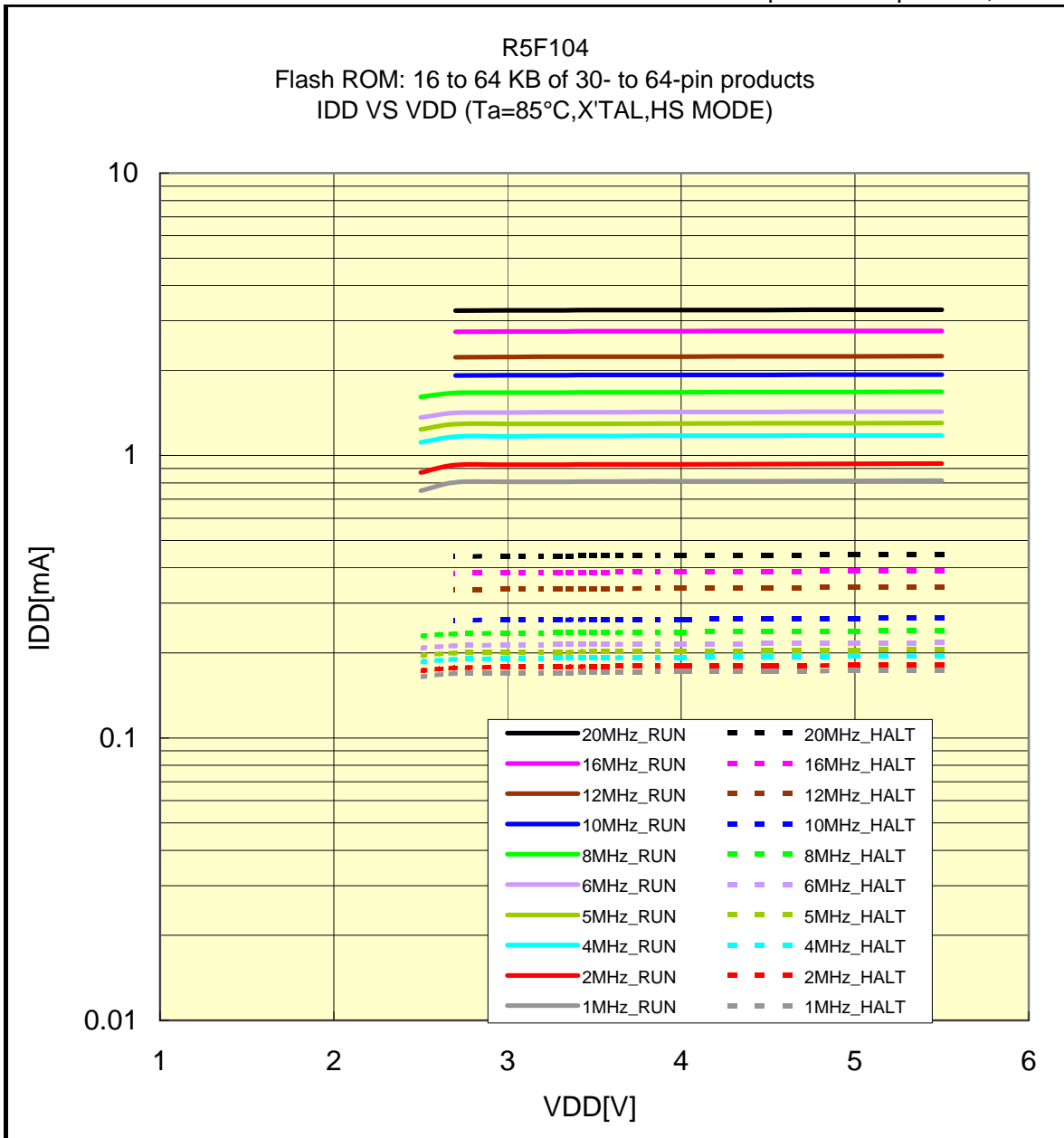IDD VS VDD (Ta=85°C,HOCO_24/12/6/3MHz,HS MODE)

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(85°C/X'TAL/HS MODE)

Prepared on Apr. 17th, 2012

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
IDD VS VDD (Ta=85°C,X'TAL,HS MODE)

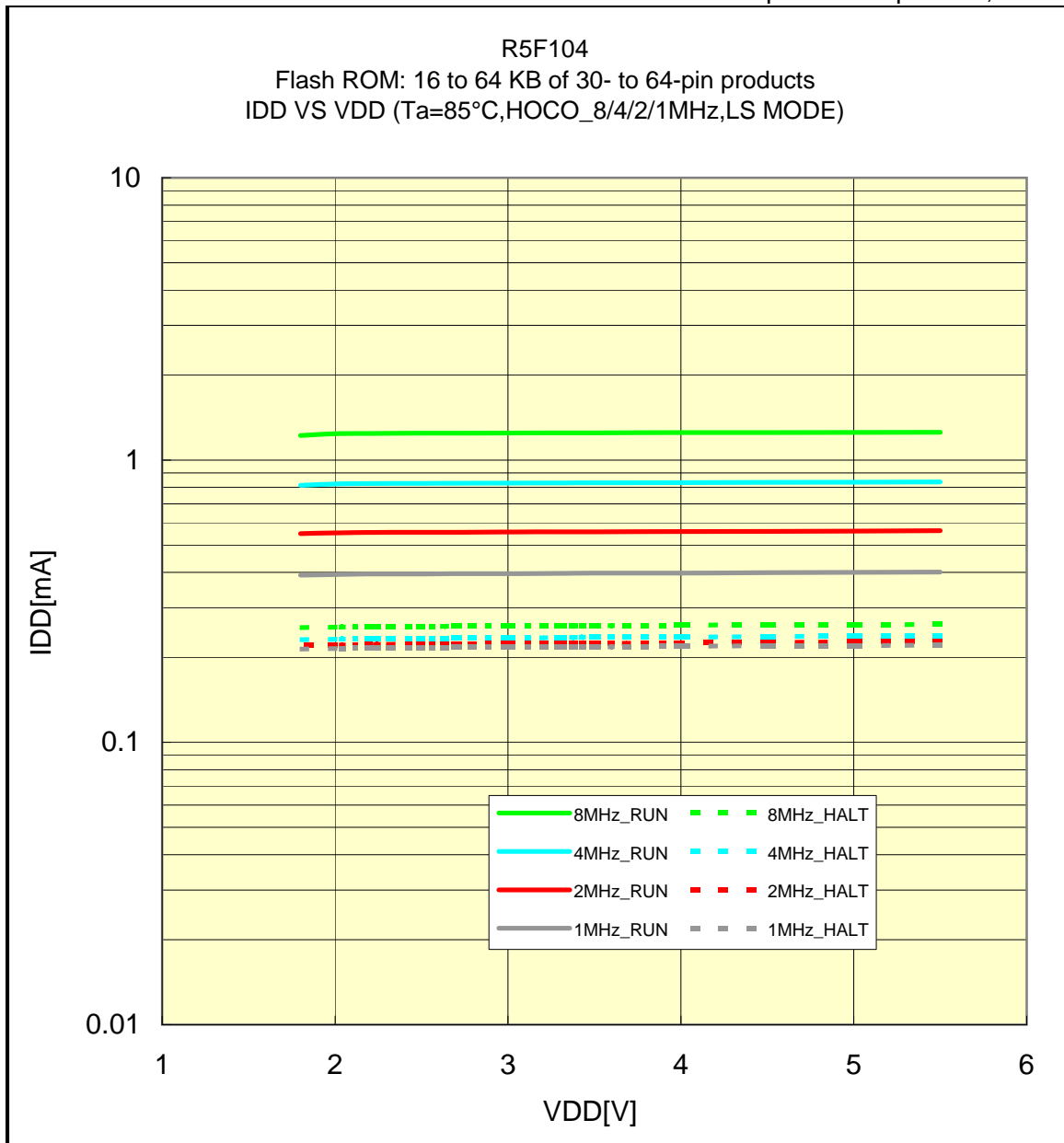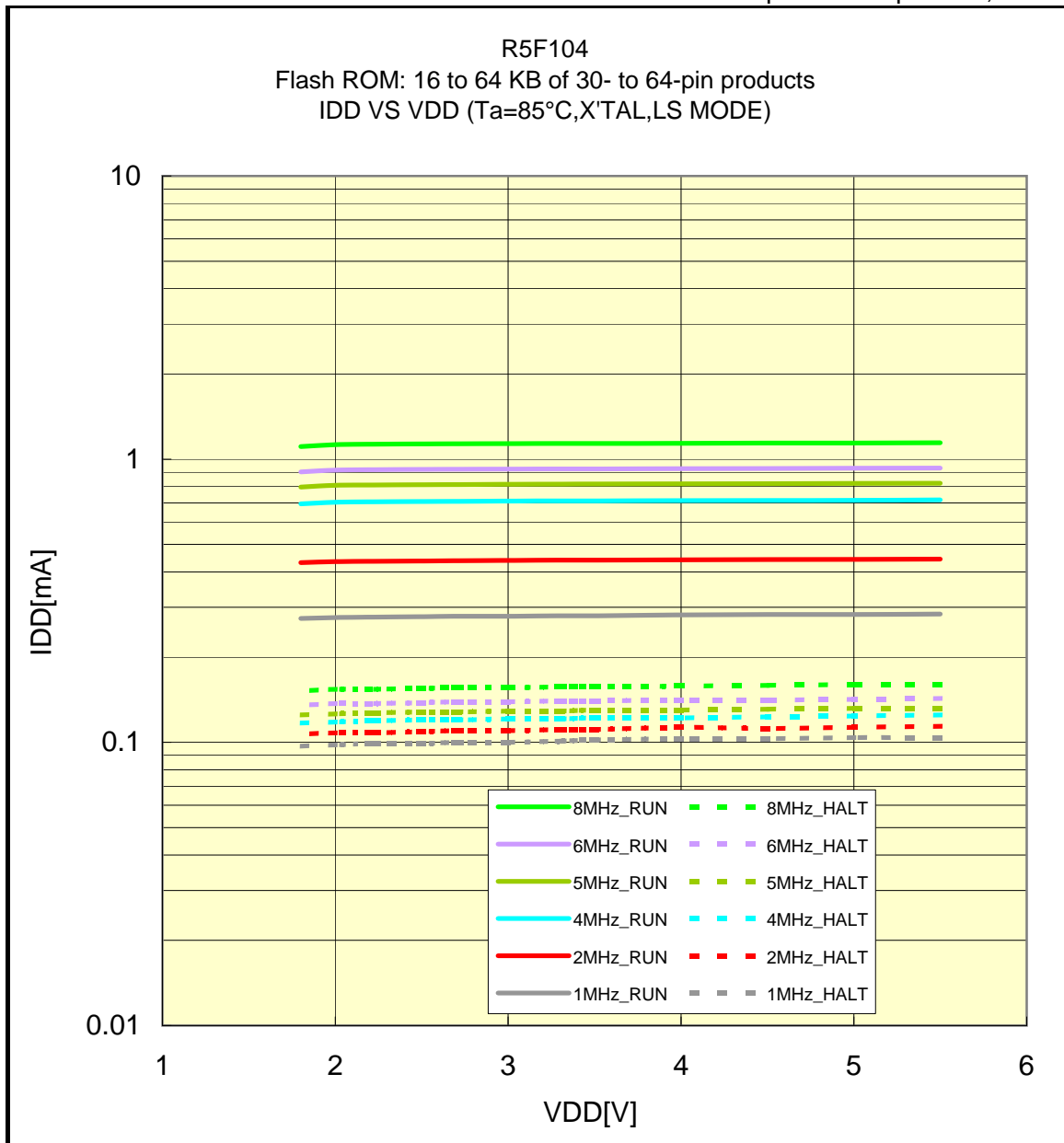|	
20MHz_RUN	20MHz_HALT
16MHz_RUN	16MHz_HALT
12MHz_RUN	12MHz_HALT
10MHz_RUN	10MHz_HALT
8MHz_RUN	8MHz_HALT
6MHz_RUN	6MHz_HALT
5MHz_RUN	5MHz_HALT
4MHz_RUN	4MHz_HALT
2MHz_RUN	2MHz_HALT
1MHz_RUN	1MHz_HALT

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(85°C/HOCO_8/4/2/1MHz/LS MODE)

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
IDD VS VDD (Ta=85°C,HOCO_8/4/2/1MHz,LS MODE)

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(85°C/X'TAL/LS MODE)

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
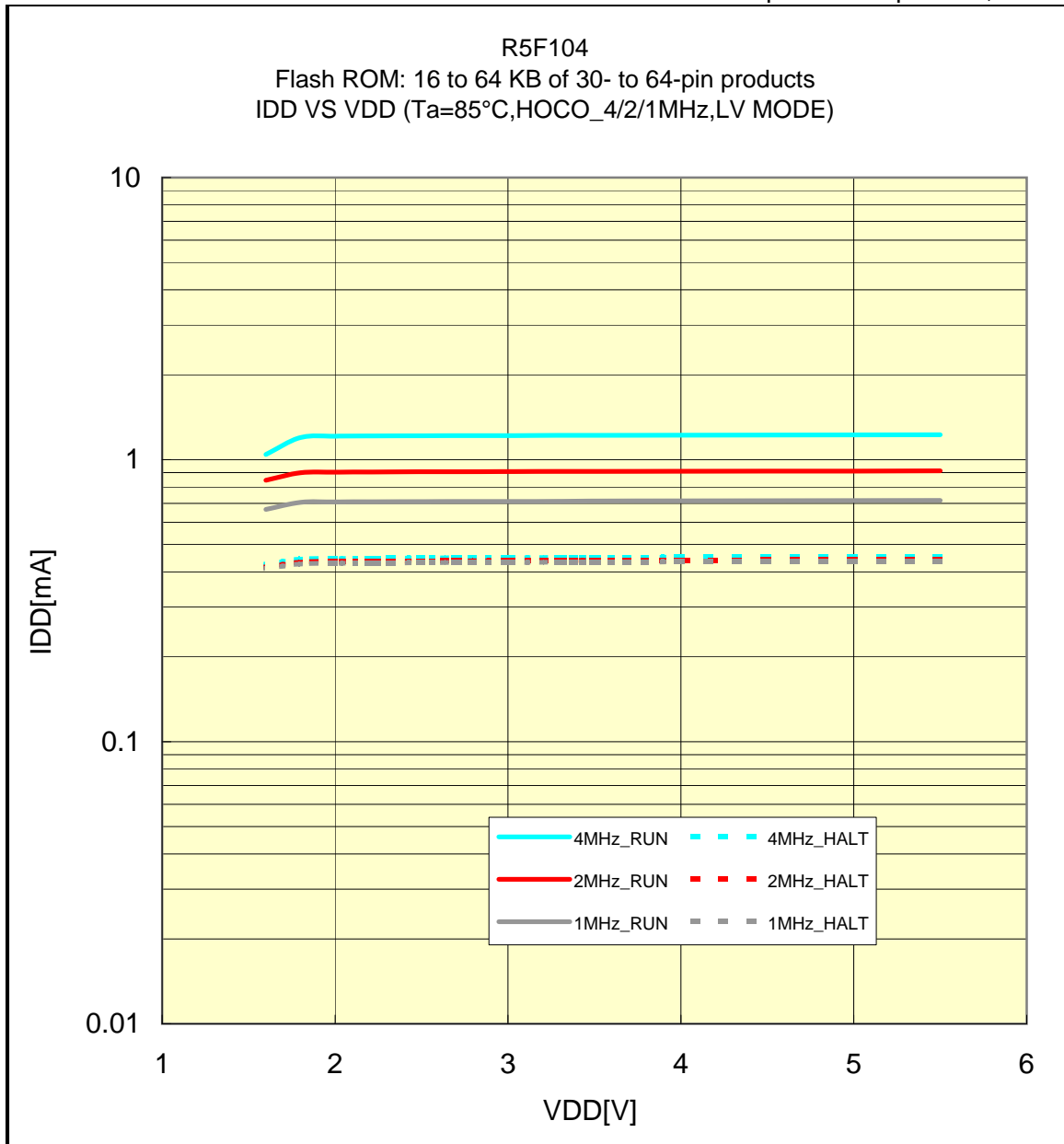IDD VS VDD (Ta=85°C,X'TAL,LS MODE)

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(85°C/HOCO_4/2/1MHz/LV MODE)

Prepared on Apr. 17th, 2012

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
IDD VS VDD (Ta=85°C,HOCO_4/2/1MHz,LV MODE)

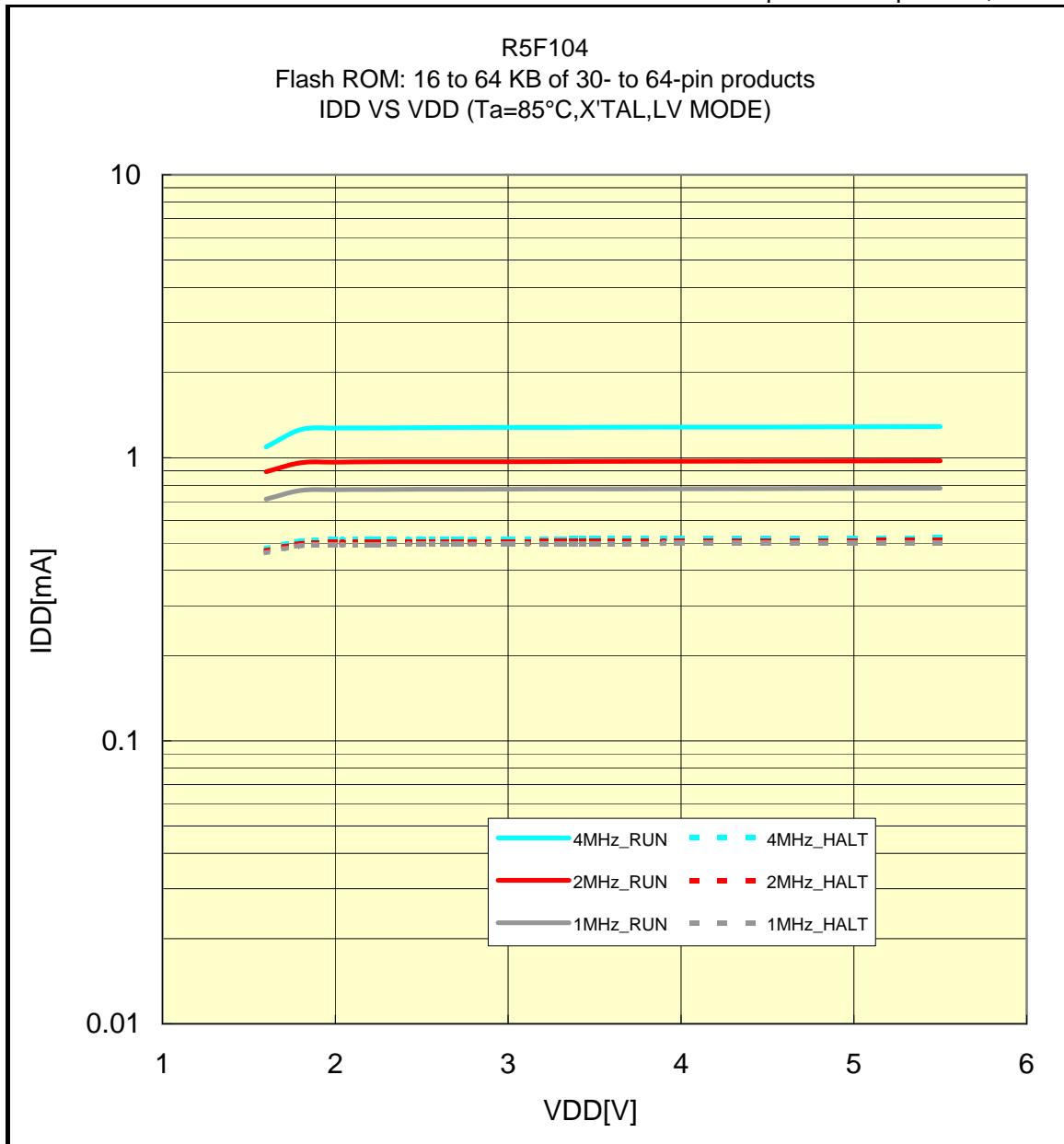| 4MHz_RUN | 4MHz_HALT |
| 2MHz_RUN | 2MHz_HALT |
| 1MHz_RUN | 1MHz_HALT |

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(85°C/X'TAL/LV MODE)

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
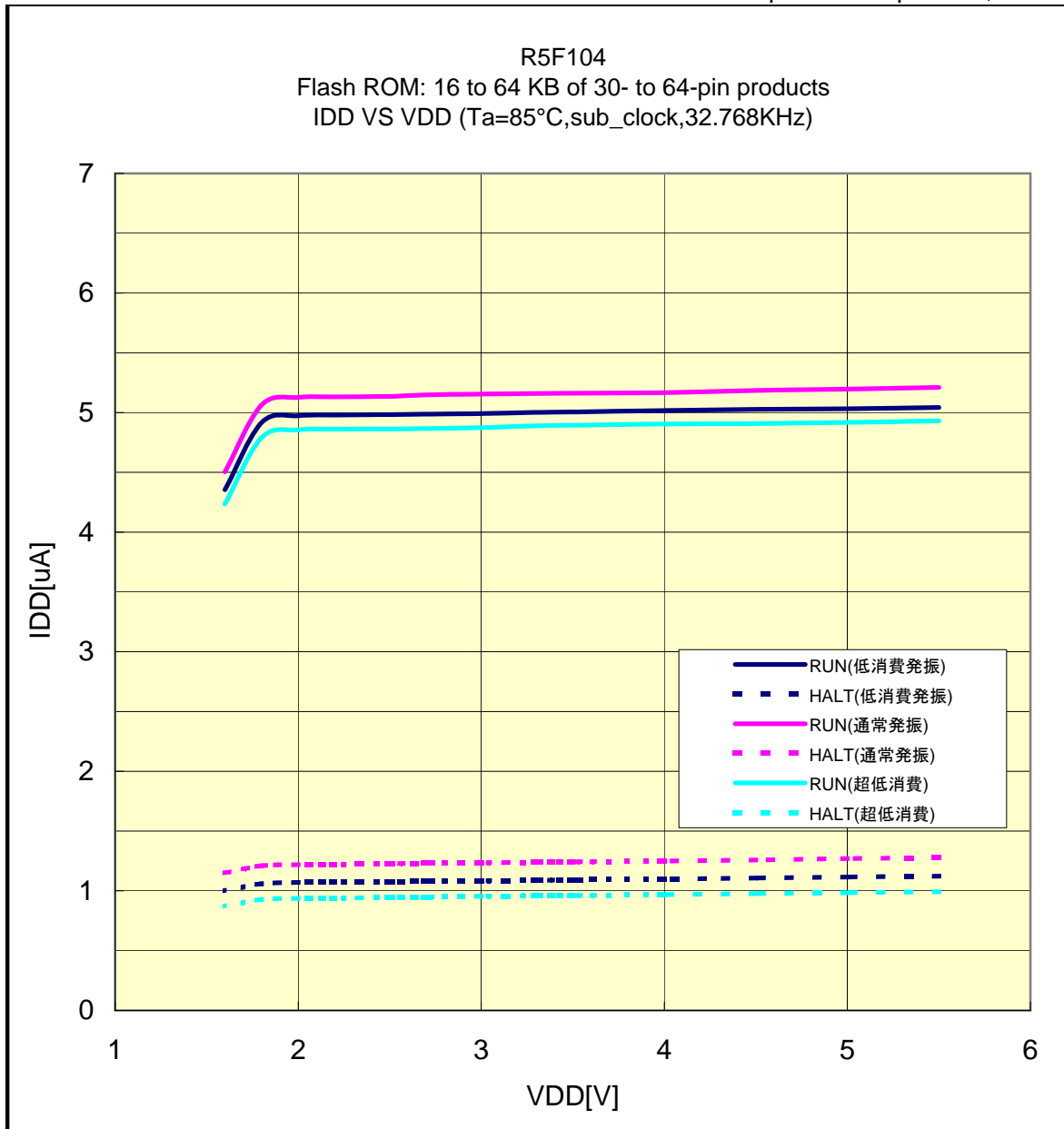IDD VS VDD (Ta=85°C,X'TAL,LV MODE)

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(85°C/sub_clock/32.768KHz)

Prepared on Apr. 17th, 2012

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
IDD VS VDD (Ta=85°C,sub_clock,32.768KHz)

Legend:
- RUN(低消費発振)
- HALT(低消費発振)
- RUN(通常発振)
- HALT(通常発振)
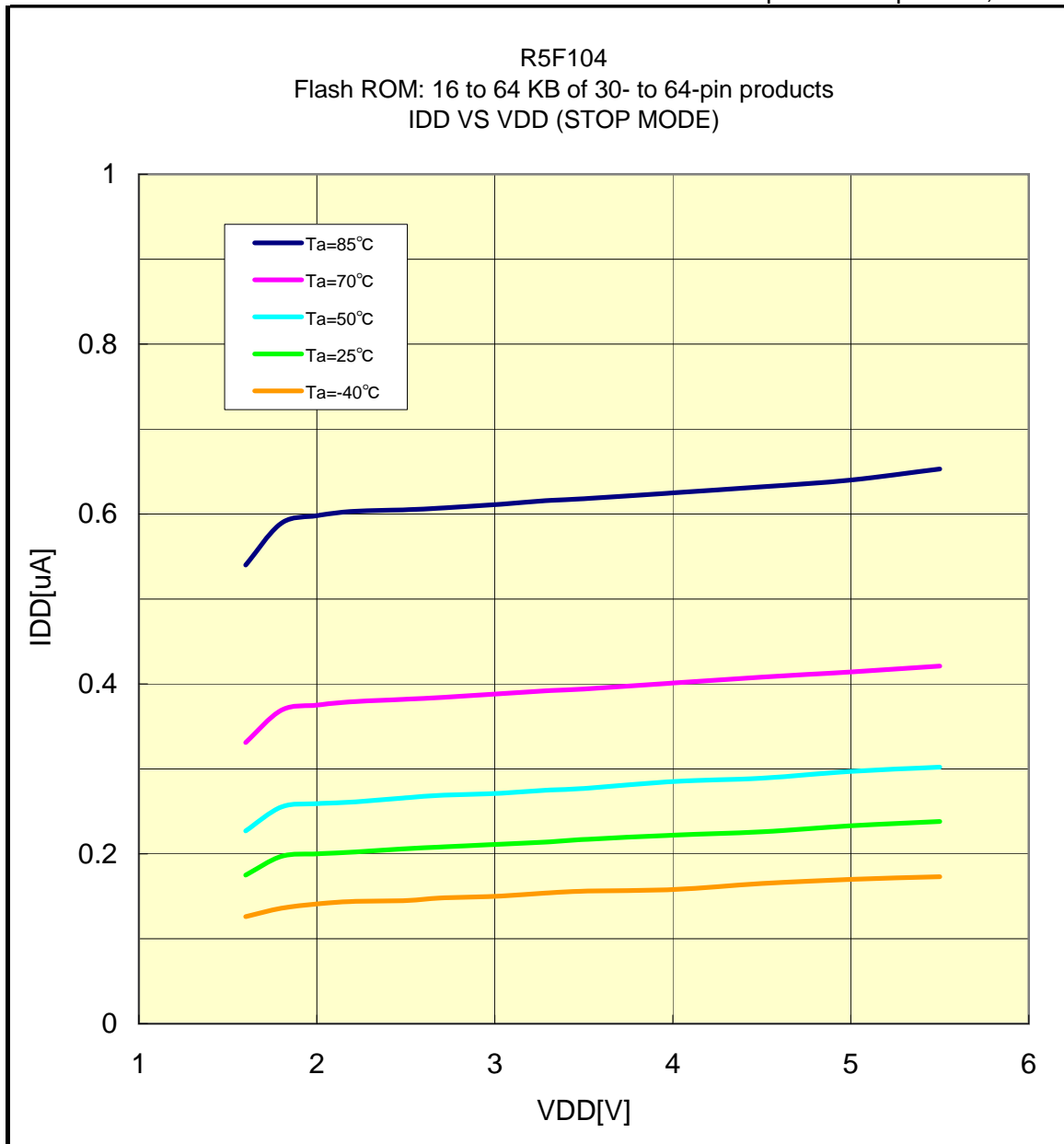- RUN(超低消費)
- HALT(超低消費)

Axis: IDD[uA] vs VDD[V]

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS VDD(STOP MODE)

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
IDD VS VDD (STOP MODE)

Legend:
- Ta=85℃
- Ta=70℃
- Ta=50℃
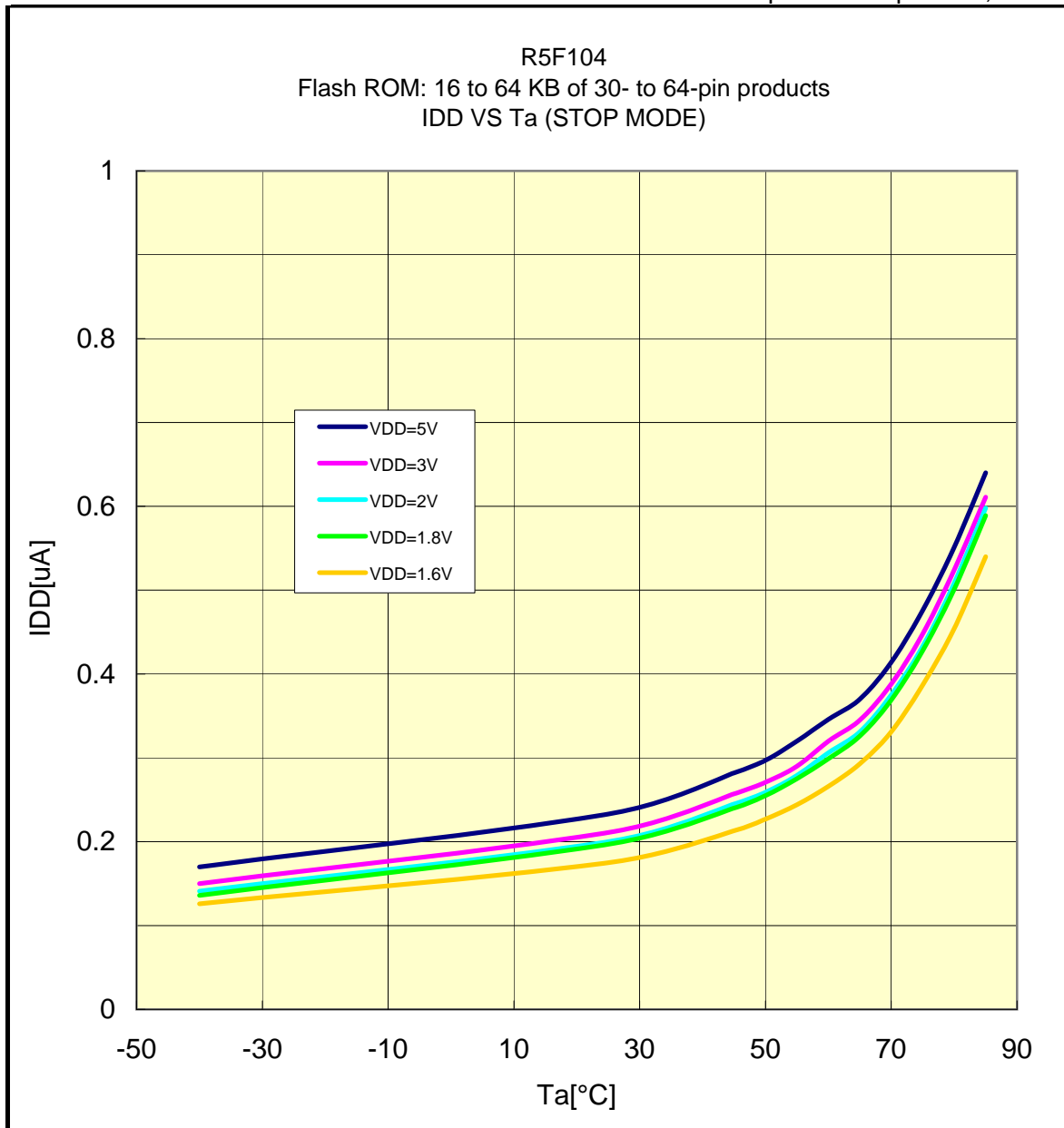- Ta=25℃
- Ta=-40℃

Y-axis: IDD[uA]
X-axis: VDD[V]

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products

IDD VS Ta(STOP MODE)

R5F104
Flash ROM: 16 to 64 KB of 30- to 64-pin products
IDD VS Ta (STOP MODE)

The above mentioned value is only for your reference. The value was measured under certain conditions and does not guarantee the product's characteristics.